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**Title of bachelor thesis:** Use of Lasers in Physiotherapy

**Subtitle:** Focused on Laser Acupuncture on Musculoligament Complex Disorders

**Abstract:**

This bachelor thesis is about the use of lasers in physiotherapy, focused on laser acupuncture on musculoligament complex disorders. The aim of this work was to find and process information from available sources of Czech and foreign literature in the form of systematic research.

The thesis is divided into four main chapters. The first chapter is devoted to essential information about lasers, mechanism of laser-tissue interactions, suitable indications, and contraindications. The second chapter focuses on acupuncture, a brief description of the basic principles and techniques of execution. The third chapter introduces the readers to the use of low-level laser within the relatively young laser acupuncture method, clarifies its therapeutic effectiveness and usability in the field of rehabilitation care. The fourth chapter is a systematic review of clinical trials and studies that assess the effectiveness of both laser therapy in general and the acupuncture point irradiation using laser acupuncture.

The discussion of the work summarizes the results of selected studies where laser therapy proved to be the most effective in vertebral algic syndromes, arthrosis, rheumatoid arthritis, painful temporomandibular joint disorders, and sports injuries.

**Keywords:** High Intensity Laser, HILT, Laser Acupuncture, Laser Therapy, LLLT, Low Level Laser